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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Moshe Malik

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EXAMINER

SHEARER, DANIEL R

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,376	Applicant(s) MALIK ET AL.	
	Examiner DANIEL R. SHEARER	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,25,30 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23,25,30 and 36-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It has not been signed by the inventor(s). See 37 CFR 1.63.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 9-11, 13, 16, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,388,761 to Langeman.

Langeman shows a plural component dispensing device (Fig. 2), comprising a casing (132, general teaching, Col. 8, ll. 34-40), a mixing chamber (84), a port (48A, 48B), two rigid containers (22A, 22B) with a plurality of chemicals that move with the casing, and separate flow generators/pumps (28A, 28B) for each chemical located between the mixing chamber and port.

Regarding claims 10 and 11, Langeman shows the flow generator including suction gears (24), and pumping the chemicals out of the containers at different rates (Col. 7, ll. 35-37).

Art Unit: 3754

Regarding claims 13 and 16, Langeman shows two heaters (36A, 36B) to heat the chemicals in the containers and a nozzle (84, 26) that mixes and releases the chemicals to the environment.

Regarding claim 19, Langeman shows a solvent flushing system to remove foam components (Col. 9, ll. 47-50) from the spray gun (26) before they solidify so that the nozzle can inherently be used over a plurality of foam generating sessions.

4. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,041,972 to Maayeh et al. (Maayeh).

Maayeh shows a base for a hand held device (Fig. 23), comprising a niche (316), a battery charger (326), a compartment (20) holding a dispensing cartridge (15) and a heater (14) to heat the contents of the cartridge.

5. Claims 1, 2, 4, 6, 7, 9, 20 and 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,533,189 to Kott et al. (Kott).

Regarding claims 1, 2, 3, 6, 7, 9 and 20, Kott shows a plural component dispensing device (Fig. 1) comprising, a casing (20), a mixing chamber (94), a port (69), two rigid containers (24) with a plurality of chemicals that move with the casing, separate flow generators/pumps (32) for each chemical located between the mixing chamber and port, and recesses (69) in the casing capable of receiving containers of different sizes (recesses are capable of receiving smaller diameter containers).

Art Unit: 3754

Regarding claims 36-38, Kott shows a plural component dispensing device (Fig. 1), comprising a mixing chamber (94), a flow generator (96) and a base portion (20) including a motor (38) a heater (22). The flow generator and mixing chamber comprise a single replaceable part (36) that is detachable from the base portion without the use of tools (Col. 8, ll. 21-26).

6. Claims 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,924,599 to Brown (Brown '599).

Brown '599 shows a chemical container (10) comprising a container (26) with a volume less than 5 liters and including foam generating components (Col. 1, ll. 23-35), a port (239) on the container, a diaphragm (interior of valve 239) adapted to receive a tube (248) and prevent flow from the container when a tube is not in the port and prevents dripping outside the tube when the tube is in the port.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 3754

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3 and 8 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 3,178,157 to Cole.

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the device being hand held. However, Cole discloses a foam generating apparatus (Fig. 1) that is hand held (Col. 1, ll. 54-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have designed the dispenser of Langeman to be hand held as taught by Cole to allow for portability of the device. Further it would have been obvious to limit the weight of the device to less than 5 kilograms to increase portability especially since it has been held that making an old device portable or movable without producing any new and

Art Unit: 3754

unexpected result involves only routine skill in the art. *In re Lindberg*, 93 USPQ 23 (1952)

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 5,526,957 to Brown et al. (Brown '957).

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the one or more containers comprising a single container with a plurality of compartments. However, Brown '957 shows a foam dispensing device (10) with a single container (26) holding foam generating components divided into two compartments (128, 130). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the two containers of Langeman as one container with two compartments as taught by Brown '957 in order to save space and material.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman.

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to specifically disclose the chemicals being pumped by the flow generator at a pressure above 5 atmospheres. However, Langeman discloses that it is known in the art to pump the chemicals at a pressure above 1000 psi or about 68 atmospheres to permit consistent impingement mixing in the spray gun (Col. 2, ll. 20-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made

Art Unit: 3754

to have designed the device of Langeman to pump the chemicals at a pressure above 5 atmospheres to permit consistent impingement mixing in the spray gun.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 5,265,761 to Brown (Brown '761).

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the device including a heater to heat the chemicals flowing from the containers. However, Brown '761 shows a foam dispensing device (Fig. 1) with a heater to heat chemicals flowing from containers in order to reduce the amount of cold shot foam released (Col. 10, ll. 36-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the hoses of Langeman with the heaters of Brown '761 in order to reduce the amount of cold shot foam released.

14. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 4,568,003 to Sperry et al. (Sperry).

Langeman shows all aspects of the applicant's invention as set forth in claims 1 and 16, but fails to disclose the mixing chamber being detachably attached to the casing or the nozzle comprising a material to which foam does not adhere. However, Sperry discloses a foam generating apparatus (Fig. 1) with a detachable mixing chamber (see abstract) comprising components made of a material to which foam does not adhere (Col. 2, ll. 55-60). It would have been obvious to one having ordinary skill in the art at

Art Unit: 3754

the time the invention was made to have manufactured the device of Langeman with the detachable mixing chamber with non-stick components of Sperry to allow for easy replacement of parts (Col. 2, ll. 15-19) and allow for easy cleaning.

15. Claims 18, 19, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 5,938,079 to Wacker et al. (Wacker).

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the nozzle and mixing chamber having flexible walls and being expanded from a zero volume when the flow generator is not operating to a larger volume by the pressure of chemical streams when the flow generator is operating. Wacker shows a foam dispensing device (Fig. 1) with two containers (12, 13) including a plurality of chemicals (see abstract), a pump (30, 21) for each container, and a nozzle (30) that includes a mixing chamber (89) with flexible walls (98) that are expanded from a substantially zero volume (Fig. 8) when the pump is not operating to a larger volume (Fig. 7) when the pump is operating to prevent the undesired dribble or drip of residual foam product (Col. 3, ll. 5-20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the foam dispensing device of Langeman with the nozzle of Wacker to prevent any undesired dribble or drip of residual foam product.

Art Unit: 3754

16. Claims 18, 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2416718 to Viellard.

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the nozzle and mixing chamber having flexible walls and being expanded by the pressure of streams of chemicals from a zero volume when the flow generator is not operating to a larger volume by the pressure of chemical streams when the flow generator is operating. Viellard shows a dispensing device (Fig. 1) with two containers (1, 2) including a plurality of chemicals (Pg. 1 of translation, Paragraph 2), a flow generator (11, 12) for each container, and a nozzle (31) that includes a mixing chamber (42, 43, 47) with flexible walls (41, 42) that are expanded by the pressure of streams of chemicals from a substantially zero volume when the flow generator is not operating to a larger volume when the flow generator is operating (Pg. 3 of translation). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the foam dispensing device of Langeman with the nozzle of Viellard to improve the mixing of the chemicals (Pg. 3 of translation).

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 4,262,848 to Chabria.

Langeman shows all aspects of the applicant's invention as set forth in claim 16, but fails to disclose that the walls of the nozzle are flexible. However, Chabria discloses a foam dispensing device (1) with a flexible nozzle extension (70) to allow for dispensing of foam to areas not accessible by the gun (Col. 5, ll. 38-41). It would have

Art Unit: 3754

been obvious to one having ordinary skill in the art at the time the invention was made to have manufactured the Langeman with the flexible nozzle extension of Chabria to allow for dispensing of foam to areas not accessible by a dispensing gun.

18. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman in view of U.S. Patent No. 4,154,368 to Gusmer et al. (Gusmer).

Langeman shows all aspects of the applicant's invention as set forth in claim 1, but fails to disclose the pusher to push the chemicals in the container toward an exit of the container. However, Gusmer discloses a foam dispensing device comprising two containers (1, 3) with foam generating chemicals and pushers in the form of pressurized nitrogen (5, 7) to ensure that the liquids will leave their containers with a small positive pressure (Col. 2, ll. 12-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the containers of Langeman with the pusher in the form of pressurized nitrogen of Gusmer to ensure that the liquids will leave their containers with a small positive pressure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL R. SHEARER whose telephone number is (571)270-7416. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

Art Unit: 3754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571)272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. R. S./
Examiner, Art Unit 3754

/Kevin P. Shaver/
Supervisory Patent Examiner, Art
Unit 3754